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Alliance AutoGas provides propane vehicle conversion and fueling to American fleets.

Memo: Alliance AutoGas Letter of Interest

Subject: Docket 09-ALT-1; 2010-2011 Investment Plan **California Emergency Responder Autogas Vehicle Initiative**

Attention: California Energy Commission, Advisory Board

Date: April 29, 2010

Dockets Office, MS-4 Re: Docket No. 09-ALT-1 1516 Ninth Street Sacramento, CA 95814-5512

To whom it may concern:

This letter provides an outline of how Alliance AutoGas can help shape the role of propane Autogas in the California alternative fuels market.

We are seeking funding from the California Energy Commission to implement a propane Autogas vehicle conversion and fueling program in the immediate short term.

This letter is sectioned into program objectives, description, merit review and some additional organizational details. We thank you in advance for your consideration and look forward to discussing at greater length.

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Program Objectives

1- Expand the role of propane Autogas in the California alternative fuels market through implementation of an immediately actionable conversion and fueling initiative to annually displace 500,000 gallons of gasoline.

Alliance AutoGas, propane Autogas vehicle conversion and fueling provider, would:

- Convert 200 light-duty emergency responder vehicles from conventional gasoline to run on clean, domestically produced Autogas
- Install and supply Autogas fueling infrastructure in California at fleet bases
- 2- Displace hundreds of thousands of gallons of gasoline, reduce carbon emissions and create green collar jobs
- 3- Fund the initiative through California Assembly Bills 118/108





Program Description

Cost

Alliance is seeking \$1.06 million through the California Energy Commission for the conversion of 200 light-duty emergency responder vehicles. At a premium of \$5,300 per vehicle for conversion, the Alliance AutoGas system offers a much greater dollar value than most systems.

By converting these existing vehicles in lieu of new vehicle purchase, a greater number of gasoline gallons can be displaced at a lower upfront cost. The low cost of implementation for conversion as well as infrastructure (when compared to other alternative fuels or other propane systems) is a testament to Alliance's superior technology.

Cost share from Alliance partners would completely fund Autogas infrastructure and installation for this program, as well as certified conversion center training and implementation. Alliance will also provide fueling, ongoing safety training and technical support.

Implementation

For this program, Alliance AutoGas will:

- Convert light-duty emergency responder vehicles to run on Autogas
- Create green jobs and provide workforce training through certified conversion centers, certified conversion technicians, fueling infrastructure and support system
- Deploy alternative fuel (Autogas) infrastructure for fleets through regional partner Blue Star Gas
- Displace nearly half a million gallons of gasoline per year with clean-burning propane
 Autogas¹
- Install publically accessible Autogas refueling stations
- Implement Autogas education programs through public relations outreach

¹ Calculation based on 200 fleet vehicles, each travelling 50,000 miles per year at an average of 20 MPG



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Program Description (Continued)

Details

Alliance AutoGas uses the Prins VSI vehicle conversion system provided by Alliance founding partner and alternative fueling system specialist American Alternative Fuel. The Prins VSI system is EPA-certified for a variety of engine platforms including trucks, vans and the law enforcement favorite Ford Crown Victoria Police Interceptor for model years 2006-2010.

Although Alliance is still working toward CARB certification for its conversion system, California law grants emergency responder vehicles an exception to CARB certification requirements.² Additionally, Alliance AutoGas conversions are performed by Certified Conversion Centers, whose training and development promotes green job creation.

An Ideal Alternative Fuel System for Emergency Responders

The Prins VSI system is a bi-fuel system; it starts on gasoline and switches immediately to Autogas. The bi-fuel system presents a particular advantage for law enforcement and other emergency responder vehicles, allowing them to operate almost exclusively on Autogas without inhibiting job function.

The vast majority of the time these vehicles will operate on Autogas at reduced emissions levels. Typically these units will fuel Autogas at their fleet base; but in the event of emergency or inability to reach an Autogas fueling station, the vehicle can temporarily run on gasoline. In certain cases, software changes to the onboard system can help limit drivers' discretionary use of gasoline.

In situations of emergency response or police pursuit, the bi-fuel system can double vehicle fuel capacity, allowing an officer or EMT to complete an emergency task before refueling, also mitigating risks of being stranded without fuel.

Beyond the clear safety advantages of a bi-fuel system, running on Autogas with the Prins-VSI system reduces emissions without sacrificing power or performance. This has been proven with emergency responders in the field time and time again.

Alliance AutoGas asserts that the Prins VSI bi-fuel system is the best alternative fuel system on the market for emergency responders — and it can be implemented in conjunction with a custom, cost-effective fueling solution right now.

² California Air and Resources Board: Statute 27156.3 Vehicles exempt from pollution control device requirements http://www.arb.ca.gov/bluebook/bb08/veh/veh-27156 3.htm (also see attached)





Merit Review

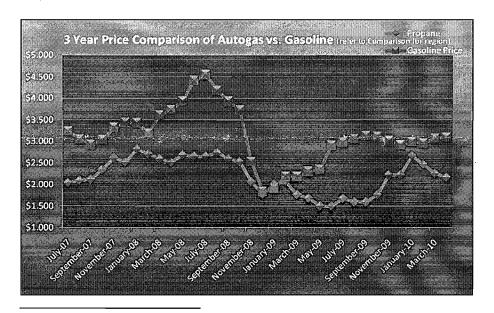
1. Clean

The California Emergency Responder Autogas Vehicle Initiative would yield energy security and environmental benefits from petroleum displacement and emissions reductions. This initiative would convert 200 light-duty fleet vehicles. If each of these vehicles drives approximately 50,000 miles annually, in one year we estimate the following harmful emissions reductions³:

Carbon Monoxide: 120,358 pounds
Volatile Organic Compound: 6,874 pounds
Nitrogen Oxide: 14,567 pounds
Particulate Matter: 22.1 pounds
Total Green House Gas + CO2 Equivalent: 2,122,015 pounds

2. Economical

Emergency response fleets can realize as much as a 30% reduction in their fuel costs by converting to Autogas, which is very attractive in light of budget constraints. The graph below demonstrates the fuel cost differential between gasoline and propane (as tracked monthly over the course of the last three years). These figures do not reflect the Federal 50 cent per gallon tax credit that would merit an additional 50 cent price break in propane⁴. In every month it was less expensive to operate a vehicle on Autogas than on gasoline.⁵



³ Based on DOE Argonne National Laboratory emissions benefit tool, http://www.transportation.anl.gov/modeling_simulation/AirCred/
⁴ The federal 50 cent per gallon tax credit was available to all propane users, including government agencies during the span of time indicated above.

⁵ These figures include road taxes for each fuel.





3. Domestically Produced

Over 90 percent of Autogas used in the United States is produced here in America, sourced from domestic refineries for natural gas as well as crude oil. Augmenting autogas use among American fleets reduces our dependence on foreign oil, fuels our energy industry and our overall economy – creating green collar jobs for Americans. Alliance AutoGas is working to grow the U.S. sustainable energy market and foster energy independence through their work with both public and private fleets.

CEC funding criteria met by the California Emergency Responder Autogas Vehicle Initiative:

- Improving alternative low-carbon fuels and light-duty vehicle technology
 - o Alliance Autogas is constantly seeking EPA certification for new vehicle platforms
 - The Alliance AutoGas Prins system presents an opportunity for California expansion into bi-fuel alternatively powered vehicles
- Optimizing existing alternative fuel vehicle engine technologies
 - o Through the expansive technical expertise of Alliance partner American Alternative Fuel, Alliance Autogas can expand the use of Autogas in the California market
 - o The Prins bi-fuel system allows emergency responder vehicles to operate on an alternative fuel without jeopardizing job function (driver can transition seamlessly to gasoline in the event of an emergency where propane fuel cannot be reached)
- Expanding alternative fueling infrastructure, stations and equipment
 - o Development of Autogas fueling stations throughout California (please see fleet infrastructure implementation below)
- Expand infrastructure as connected with fleets, public transportation and corridors
 - o Implementation of Autogas fueling infrastructure on fleet bases as well as select publically accessible Autogas infrastructure implementation
- Establish work force training programs, conduct public education/promotion, create technology centers
 - Establishment of technology centers and workforce training technicians through Alliance AutoGas certified conversion centers
 - o Public education and promotion to be conducted through Alliance AutoGas public relations outreach





Upon successful completion of the program outlined above, Alliance AutoGas will likely apply for subsequent fiscal year funding to supplement additional vehicle conversions in the state of California.

We thank you for your time and hope we can work together toward a cleaner California in the future.

Best Regards,

Jeff Stewart

President, Blue Star Gas

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Partner, Alliance AutoGas

About Alliance AutoGas

A partnership founded by Blossman Gas (the nation's largest independent propane retailer) and American Alternative Fuel, Alliance AutoGas is a nationwide network of certified conversion centers, fuel suppliers and equipment manufacturers that converts vehicle fleets from conventional gasoline to clean-burning, domestically produced propane Autogas.

Alliance AutoGas, in partnership with Virginia Clean Cities, was awarded one of 25 alternative energy-related grants under the American Recovery and Reinvestment Act of 2009.

- Under this program, administered by the US Department of Energy, Alliance AutoGas will convert approximately 1,200 vehicles from gasoline to Autogas
- 240 of those 1200 vehicles are law enforcement vehicles

Alliance Autogas' west coast partner, Blue Star Gas, is a 70-year old, family-run propane company. Blue Star Gas serves the propane needs of Oregon and Northern California and is currently expanding its range of services in the greater California area.



